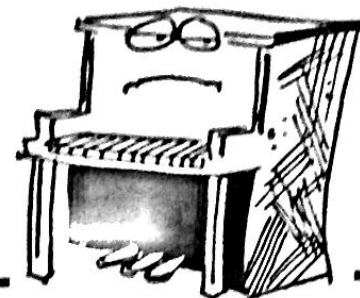


# Why Didn't the Piano Work?

Factor the expression. Find a factor in each of the two answer columns. One factor will have a letter and the other a number. Write the letter in the matching numbered box at the bottom of the page.



<b>Set 1</b> <b>a.</b> $x^2 - 6x$ <b>b.</b> $2x^2 + 8x$ <b>c.</b> $45x^2 - 20x$ <b>d.</b> $9x^3 + 30x$ <b>e.</b> $8x^5 - 15x^3$		<b>Set 1 Answers</b> <b>ii.</b> $x^3$ <b>T.</b> $(3x^2 + 10)$ <b>6.</b> $2x^2$ <b>O.</b> $(x - 6)$ <b>24.</b> $2x$ <b>V.</b> $(8x^2 + 15x)$ <b>2.</b> $3x$ <b>S.</b> $(9x - 4)$ <b>16.</b> $x$ <b>F.</b> $(3x^2 - 4)$ <b>14.</b> $x^2$ <b>N.</b> $(8x^2 - 15)$ <b>8.</b> $5x$ <b>A.</b> $(x + 4)$		<b>Set 3</b> <b>a.</b> $m^3n + 9m^2n$ <b>b.</b> $10m^3n^2 - 25m^2n^3$ <b>c.</b> $49m^5n^3 + 28mn^4$ <b>d.</b> $72m^7n + 24n$ <b>e.</b> $8m^3n^4 - 22m^5n^6$		<b>Set 3 Answers</b> <b>10.</b> $5m^2n^2$ <b>L.</b> $(4 - 11m^2n^2)$ <b>7.</b> $24n$ <b>P.</b> $(7m^4 + 4n)$ <b>18.</b> $7mn^4$ <b>S.</b> $(2m - 5mn^2)$ <b>1.</b> $m^2n$ <b>W.</b> $(3m^7 + 1)$ <b>12.</b> $2m^3n^4$ <b>I.</b> $(m + 9)$ <b>22.</b> $7mn^3$ <b>L.</b> $(4 - 11mn^3)$ <b>5.</b> $8mn$ <b>O.</b> $(2m - 5n)$	
<b>Set 2</b> <b>a.</b> $8a^3 + 4a^2 + 12a$ <b>b.</b> $7a^4 - 35a^3 - 14a^2$ <b>c.</b> $6a^8 + 10a^6 - 3a^4$ <b>d.</b> $36a^3 - 24a^4 + 60a^5$ <b>e.</b> $30a^6 - 75a^5 - 15a$		<b>Set 2 Answers</b> <b>7.</b> $2a^2$ <b>Y.</b> $(a^2 - 5a - 2)$ <b>6.</b> $a^4$ <b>P.</b> $(2a^5 - 5a^4 - 3)$ <b>15.</b> $15a$ <b>T.</b> $(3 - 2a + 5a^2)$ <b>13.</b> $7a^2$ <b>K.</b> $(2a^2 + a + 3)$ <b>9.</b> $3a^2$ <b>H.</b> $(2a^5 - 5a^4 - 1)$ <b>4.</b> $4a$ <b>O.</b> $(6a^4 + 10a^2 - 3)$ <b>19.</b> $12a^3$ <b>N.</b> $(3 - 2a - 5a^3)$		<b>Set 4</b> <b>a.</b> $40x^2 - 100xy - 80y^2$ <b>b.</b> $12x^5y^2 + 9x^4y^2 - 6x^3y^2$ <b>c.</b> $15x^3y - 35x^2y^2 + 40xy^3$ <b>d.</b> $144x^8y^2 + 27x^4y + 9x^2$ <b>e.</b> $2\pi x^2 - \pi y^2$		<b>Set 4 Answers</b> <b>17.</b> $5xy$ <b>R.</b> $(4x^2 + 3x - 6y)$ <b>21.</b> $3x^2y$ <b>N.</b> $(16x^6y^2 + 3x^2y + 1)$ <b>5.</b> $9x^2$ <b>O.</b> $(2x^2 - 5xy - 4y^2)$ <b>3.</b> $5x^2$ <b>Y.</b> $(4x^2 + 3x - 2)$ <b>25.</b> $3x^3y^2$ <b>L.</b> $(2x^2 - y^2)$ <b>23.</b> $\pi$ <b>S.</b> $(3x^2 - 7xy - 4y^2)$ <b>20.</b> $20$ <b>W.</b> $(3x^2 - 7xy + 8y^2)$	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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